## Contact

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## Top Skills

Finite Element Analysis
Numerical Analysis
Structural Mechanics

## Languages

Englisch
Russisch
Deutsch

## Certifications

Industrial IoT on Google Cloud
Convolutional Neural Networks
AI For Medical Treatment
Sequence Models
Structuring Machine Learning Projects

## Publications

Reliable Metal Loss Grid Data from MFL ILI

Concerted, computing-intense novel MFL approach ensuring reliability and reducing the need for dig verification (IPC2020-9361)

3-D Metal Loss Profiles from MFL Data

Calculation of a laser-scan-likle 3D defect profile from conventional MFL data for more accu-rate defect assessment and prediction of a safe operating pressure.

Computing 3D Metal Loss from MFL ILI Data for Reliable Safe Pressure Prediction

## Patents

Inspection device and inspection unit

# Andrey Danilov

Expert
Greater Munster Area

## Summary


Strong background in In-line Inspection (ILI) methods such as MFL, UT, and EMAT, as well as numerical methods. Experienced in developing new approaches for data processing and tool construction elements. Author of multiple patents.


## Experience

### Rosenxt Group

Expert
October 2023 - Present (2 years 5 months)
Lingen (Ems), Niedersachsen, Deutschland

Leading the development of new methods and technologies at the early stage, building MVPs, and establishing development and service teams for ongoing advancement.

### ROSEN

14 years 7 months

Expert
November 2022 - October 2023 (1 year)
Lingen (Ems), Niedersachsen, Deutschland

Leading the development of new methods and technologies at the early stage, building MVPs, and establishing development and service teams for ongoing advancement.

Scientist
April 2009 - November 2022 (13 years 8 months)
Lingen

Project management, conceptualizing new tools, developing modeling methods for structural mechanics and electromagnetic problems, and creating data processing tools using machine learning techniques. Research and development focused on MFL (Magnetic Flux Leakage), EMAT (Electromagnetic Acoustic Transducers), and UT (Ultrasonic Testing) for ILI (In-Line Inspection) measurement techniques.

Method for determining the geometry of an object on the basis of data from non-destructive measurement methods

Pig, in particular an inspection or cleaning pig

Method for determining the geometry of a defect on the basis of non-destructive measurement methods using direct inversion

Method and inspection device for examining the cathodic protection of a pipeline

### INTES GmbH

Numerical Software Developer
October 2004 - March 2009 (4 years 6 months)

FEM calculations, FE code development for contact mechanics and solving large systems of linear equations.

### VOSTSIBTISIZ

7 years 3 months

Senior Software-Developer
October 2000 - February 2002 (1 year 5 months)

Development of software and methods for FEM simulation and engineering calculations.

Software-Developer
December 1994 - October 2000 (5 years 11 months)

Development of numerical software for seismic response simulation and FEM calculations.

### Irkutsk National Research Technical University

Research And Teaching Assistant
September 1999 - December 2001 (2 years 4 months)
Irkutsk, Oblast Irkutsk, Russland

Research topic: Modelling of seismic wave propagation in soils.

## Education

### Universität Stuttgart

Master of Science (M.Sc.), Computational Mechanics of Material and Structures · (2002 - 2004)

### Irkutsk State University

Physiker, Dipl. Phys., Numerical Simulation · (1992 - 1997)